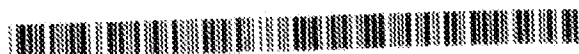


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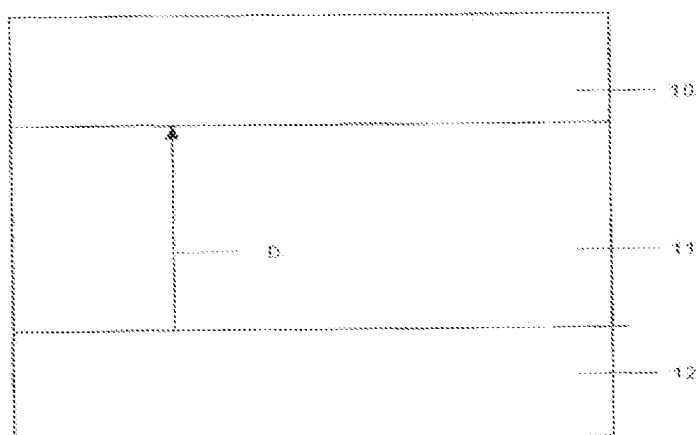
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[Continued on next page]

(54) Title: COMPOUND SEMICONDUCTOR DEVICE AND METHOD OF PRODUCING THE SAME



(57) Abstract: A semiconductor device comprises an Si substrate (10) and a compound layer (11) of Si_{1-x}Ge_x disposed on the substrate (10). X is varied from 0 to 0.2 away from the substrate (10) towards the upper surface of the compound layer (11), with the rate of change of X increasing through the layer. The increasing rate of change of X significantly improves the defectivity levels and the surface roughness at the surface of layer (11).

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